



GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Fiscal Note 2009 Biennium

Bill #	HB0308	Title:	High performance buildings for community development act
Primary Sponsor:	Van Dyk, Kendall	Status:	As Introduced

- | | | |
|---|---|--|
| <input type="checkbox"/> Significant Local Gov Impact | <input checked="" type="checkbox"/> Needs to be included in HB 2 | <input checked="" type="checkbox"/> Technical Concerns |
| <input type="checkbox"/> Included in the Executive Budget | <input checked="" type="checkbox"/> Significant Long-Term Impacts | <input type="checkbox"/> Dedicated Revenue Form Attached |

FISCAL SUMMARY

	<u>FY 2008 Difference</u>	<u>FY 2009 Difference</u>	<u>FY 2010 Difference</u>	<u>FY 2011 Difference</u>
Expenditures:				
General Fund	\$2,221,573	\$2,103,172	\$1,600,358	\$3,734,168
State Special Revenue	\$60,674	\$46,226	\$600,139	\$1,310,231
Federal Special Revenue	\$0	\$0	\$533,453	\$1,244,723
Other Funds	\$0	\$0	\$889,088	\$2,074,538
Revenue:				
General Fund	\$0	\$0	\$0	\$0
State Special Revenue	\$0	\$0	\$0	\$0
Federal Special Revenue	\$0	\$0	\$0	\$0
Other Funds	\$0	\$0	\$0	\$0
Net Impact-General Fund Balance	<u>(\$2,221,573)</u>	<u>(\$2,103,172)</u>	<u>(\$1,600,358)</u>	<u>(\$3,734,168)</u>

Description of fiscal Impact:

This bill would require energy efficiency audits on all state buildings and that buildings approved by future legislatures be Leadership in Energy and Environmental Design (LEED) certified.

FISCAL ANALYSIS

Assumptions:

Department of Environmental Quality (DEQ)

1. The DEQ shall audit all state owned or state funded facilities. It is assumed that this will include all state buildings of 1,000 square feet or larger in size. It is also assumed that buildings that are leased by state government, but not managed by state government, are not included. There are 2,106 buildings that must be audited under this bill.

2. The cost to audit these 2,106 state buildings will be \$3,726,696. This calculation is derived from the number of state buildings of various sizes owned by state government. Audit costs are typically less per square foot for large buildings than for smaller buildings. Costs are adjusted by size of building assuming \$0.12 for buildings 30,000 sq. ft. or larger; \$0.17 for buildings between 20,000 and 29,999 sq. ft; \$0.22 for buildings between 10,000 and 19,999 sq. ft. and \$0.27 for buildings between 1,000 and 9,999 sq. ft.

Number of State Buildings by Size Groupings

Size Group (Sq ft.)	Number	Total Sq. Ft.	Cost per Sq. ft	Total Cost of Audits
30,000 and over	183	12,914,667	\$0.12	\$1,549,760
20,000-29,999	64	1,522,666	\$0.17	\$258,853
10,000-19,999	144	2,448,314	\$0.22	\$538,629
1,000-9,999	1715	5,109,086	\$0.27	\$1,379,453
TOTAL	2,106	21,994,733		\$3,726,696

Source: DOA, Architecture and Engineering Division

3. Assuming the total audit cost is \$3,726,696 over 2 years, the annual cost of audits would be \$1,863,348 in FY 2008 and FY 2009.
4. The department shall examine existing energy efficiency and renewable energy programs and identify underused program strategies. The department shall determine where system upgrades should be made to reduce energy cost and create energy savings, and shall estimate a cost of the upgrades. This will require three additional FTE that are estimated in assumption 6.
5. The department shall submit a report that will include recommendations for increasing energy efficiency and the use of renewable energy. The report will also estimate the cost and projected savings from the measures to be implemented. A database will be needed to manage the amount of information being requested for this bill. The cost of this data base is estimated at \$103,710. This amount includes \$30,000 for purchase of the data base and \$73,710 to collect the information and input the necessary data. This work would be contracted at an estimated cost of \$35 per building for 2,106 buildings, which results in the \$73,710 total.
6. 3.00 FTE will be needed under this bill to 1) oversee the contract to develop a database and collect data, 2) analyze the data and determine which buildings to audit, 3) review audits and use audit results, and 4) prepare a report on the recommendations for increasing energy efficiency and the use of renewable energy and project the cost and savings from energy efficiency measures.
7. The FTE would include two mechanical engineers budgeted at \$65,559 annually for personal services and \$29,992 in FY 2008 and \$24,517 in FY 2009 for operating costs to support the positions. The operating costs in FY 2008 are higher for office set up purposes. All contracts would be awarded in FY 2008 and FY 2009. FTE would be needed for four years in order to review all buildings and do the analysis needed for energy savings potential.
8. The FTE would also include one administrative specialist budgeted at \$44,788 in FY 2008 and FY 2009 for personal services and \$18,625 in FY 2008 and \$14,884 in FY 2009 for operating costs to support the position. The operating costs in FY 2008 are higher for office set up purposes.
9. Assume that energy efficiency standards for new building construction would primarily impact the Department of Administration, Architecture and Engineering Division. Some additional work would be needed in reviewing the energy savings from new construction. This work could be completed by the 3.00 FTE discussed in assumption 6.
10. Assume that energy efficiency standards for state purchasing must be Energy Star compliant. Energy Star is a well recognized identification of energy efficiency equipment and these products are already frequently

purchased. Energy efficient products sometimes are slightly more expensive to purchase, but additional costs are paid for through reduced energy cost over the use of the product. Assume no additional cost for this requirement.

11. The bill requires that “all maintenance for state buildings must incorporate practices designated by LEED silver standard for existing buildings.” It is assumed that this requirement would apply to buildings that had been constructed or renovated and had a maintenance budget set aside by the legislature because it amends 17-7-206, MCA. These practices include water efficiency, building commissioning, minimum energy performance, source reduction and waste management, toxic material source reduction and air quality actions. It is further assumed that these costs would be included in the design costs as determined by the Department of Administration. No calculation of costs has been made for this requirement if it is intended to apply to the 2,106 state buildings over 1,000 square feet in size, or to all 1,744 state buildings under 1,000 square feet in size.

12. A 2.5% inflation factor was applied for FY 2010 and FY 2011.

Department of Administration/Architecture & Engineering Division (DOA/A&E)

13. Section 2 LEED requirements and certification will apply to all buildings included in the 2010-2011 Long Range Building Program (LRBP) and subsequent LRBPs.
14. LEED silver rating requires 33-38 points of a possible 69 from the following categories (points): site (14), water efficiency (5), energy & atmosphere (17), materials & resources (13), indoor environmental quality (15), innovation & design process (5).
15. Certification requires documentation and substantiation of compliance by the design team and contractors, submission to U.S. Green Building Council (USGBC) and USGBC’s certification of the project.
16. Registering projects with USGBC will cost \$600 per project. Certification fees for design review and construction vary depending on size of building. The department assumed a cost of \$0.03 per square foot for USGBC review.
17. Design fees will increase by 15% to cover the documentation and reporting; this increase will be less on larger projects but greater on smaller projects and will vary with the specific sustainable strategy incorporated to achieve specific credits. Average fee is 10% of construction cost.
18. Construction cost will increase 10% for documentation and additional requirements placed on the contractor and an average of 15% for building enhancements.
19. A&E will design and construct 50 projects in FY 2010 and FY 2011 at a combined value of \$50,000,000 and affecting 400,000 square feet of building.
20. The impact for the 2011 biennium is split 30% in FY 2010 and 70% in FY 2011.
21. A&E staff will need to implement staff training in FY 2008 to properly administer the requirements of this bill with an estimated cost of \$13,200.
22. Cost increases associated with LEED certification will be funded from 45% from the general fund, 15% from state special revenue, 15% from federal special revenue, and 25% from other funds.
23. A & E will hire an engineer to support implementation of LEED into project design & construction; that person and a 0.50 FTE support staff will support implantation of additional energy projects identified by the section 1 audits beginning in FY 2010.

	<u>FY 2008 Difference</u>	<u>FY 2009 Difference</u>	<u>FY 2010 Difference</u>	<u>FY 2011 Difference</u>
<u>Fiscal Impact:</u>				
DEQ				
FTE	3.00	3.00	3.00	3.00
<u>Expenditures:</u>				
Personal Services	\$175,906	\$175,906	\$180,304	\$184,812
Operating Expenses	\$2,045,667	\$1,927,266	\$65,516	\$67,154
TOTAL Expenditures	\$2,221,573	\$2,103,172	\$245,820	\$251,966
<u>Funding of Expenditures:</u>				
General Fund (01)	\$2,221,573	\$2,103,172	\$245,820	\$251,966
<u>DOA/A&E</u>				
FTE	1.00	1.00	1.50	1.50
<u>Expenditures:</u>				
Personal Services	\$45,274	\$46,226	\$63,911	\$65,508
Operating Expenses	\$15,400	\$0	\$3,559,127	\$8,298,152
TOTAL Expenditures	\$60,674	\$46,226	\$3,623,038	\$8,363,660
<u>Funding of Expenditures:</u>				
General Fund (01)	\$0	\$0	\$1,600,358	\$3,734,168
State Special Revenue (02)	\$60,674	\$46,226	\$600,139	\$1,310,231
Federal Special Revenue (03)	\$0	\$0	\$533,453	\$1,244,723
Other Funds	\$0	\$0	\$889,088	\$2,074,538
TOTAL Funding of Exp.	\$60,674	\$46,226	\$3,623,038	\$8,363,660
<u>Net Impact to Fund Balance (Revenue minus Funding of Expenditures):</u>				
General Fund (01)	(\$2,221,573)	(\$2,103,172)	(\$1,846,178)	(\$3,986,134)
State Special Revenue (02)	(\$60,674)	(\$46,226)	(\$600,139)	(\$1,310,231)
Federal Special Revenue (03)	\$0	\$0	(\$533,453)	(\$1,244,723)
Other Funds	\$0	\$0	(\$889,088)	(\$2,074,538)

Long-Range Impacts:

1. Design and construction costs for some (primarily smaller) buildings will increase. The impact for design and construction for major buildings will be less significant.
2. Registration, documentation, substation costs for all buildings will increase significantly.
3. Operational costs may be reduced.

Technical Notes:

1. Section 2. (1): Applying the definition of “building” and “construction” in 17-7-201. Many projects included in the building program may not be possible, realistic, or desirable to achieve silver certification.

Sponsor's Initials

Date

Budget Director's Initials

Date